

REMARKS/ARGUMENTS

I. Concerning the Amendments

The specification is amended at page 6 to correct a clear typographical error relating to the units used to express dry coatweight. The fact that dry coatweight is expressed using the units g/m^2 throughout the remainder of the specification and the claims is evidence that the units cm/m^2 is a typographical error. Claims 72-74 are also amended to correct a typographical error.

Claims 1 and 30 are amended to specify a web velocity of at least 600 m/min., which is not disclosed in the prior art in connection with the preparation of coated substrates using a curtain containing reactive components. This amendment is supported in the specification in the first paragraph of page 16. Claims 1 and 30 are further amended to specify that the solids content of the curtain is at least about 45 weight percent. Support for this amendment is found in the specification in the last paragraph of page 14. Claims 27, 49, 58 and 63 are cancelled in view of the fact that they no longer further limit the claims from which they depend. New Claims 75-79 are supported at page 16 of the specification, and new Claim 80 is supported at pages 14, line 26, and 16, line 6, and by original Claims 1, 8, 25, and 67. Claims 24 and 46 are cancelled in view of the fact that they no longer further limit the claims from which they depend. No new matter is presented by these amendments.

The amendments and new Claims 75-80 are presented in response to Examiner's new arguments in the Final Office Action. As such, they could not have been presented earlier. The amendments are also believed to place the application in better condition should an appeal be necessary.

II. Concerning the Rejection over Prior Art

All pending claims stand rejected as obvious over Yokota in view of secondary references, including Schweizer and/or additional references.

Yokota teaches multilayer coating but at low speed (200 m/min and lower) and relatively low solids. Examiner argues that Schweizer teaches coating speeds of up to 1800 m/min with up to 10 layers.

It is respectfully submitted that the prior art does not render Applicants' process obvious within the meaning of Section 103(a). Obviousness under 35 USC 103(a) requires that the prior art provide some teaching or suggestion which would impel a person skilled in the art to do what applicants have done, in other words, which would motivate the skilled artisan to make the particular changes and modifications necessary to arrive at the invention as claimed. The mere fact that the prior art could be modified so as to arrive at the claimed invention does not suffice to render such a modification *prima facie* obvious where a suggestion of the desirability of the modification is lacking. In re Gordon, 221 USPQ 1125 (CAFC 1984)

Compared to Applicants' pending independent Claims 1, 30, and 80, Yokota differs in that Yokota teaches a low speed, low solids process. The art contains no motivation for one of ordinary skill to modify the teachings of Yokota to operate at higher speed or higher solids. More specifically, the prior art does not contain any teaching as to how one would modify the teachings of Yokota to arrive at the process of Applicants' pending claims.

In addition, the Schweizer reference does not support a *prima facie* case of obviousness, as it is a non-enabling reference with respect to the subject matter of Applicants' pending claims. References relied upon to support a rejection must provide an enabling disclosure, i.e. they must place the invention in the possession of the public. As discussed in Dewey & Alma Chemical Co. v. Mimex Co., 52 USPQ 138 (2d Cir. 1948), a reference can not accidentally disclose an invention, but must contain adequate directions for the practice of an invention. It is not enough that the cited reference offers no more than a starting point for further experiments, or that its teachings will sometimes fail and sometimes succeed, or that it does not inform the art how to practice the invention. Applicants position is that Schweizer does not enable one skilled in the art to operate *at Applicants claimed conditions*. As such, Schweizer also fails as a secondary reference, as it does not inform the artisan how to modify Yokota to arrive at the process of Applicants' pending claims.

Examiner cites Schweizer for teaching that simultaneous multilayer curtain coating is well known, and cites Hughes and Yokota '884 as references as evidence that

Schweizer is enabling. However, it is important to note, as mentioned above, that Yokota '884 is directed to a low-speed process. Applicants position is that Schweizer does not enable Applicants claimed high speed process. Accordingly, the low-speed process of Yokota can not provide the missing enablement for Schweizer. Applicants further note that Hughes is not cited as a basis of rejection, i.e. there is no rejection of the claims as being obvious over Yokota in view of the combination of Schweizer and Hughes.

Even if Hughes is added to the list of references supporting this rejection, Applicants have stated that coatings have been prepared via simultaneous multilayer curtain coating when using low viscosity and low solids content photographic coating compositions; see Applicants' specification at page 4, lines 24 et seq., citing, e.g Hughes. Example 2 of Hughes is the example showing the highest coating speed, and it teaches simultaneous 2-layer coating of low solids, low viscosity photographic emulsions at a substrate speed of 1,000 cm/sec (600 m/min.). Applicants' pending claims specify that the solids content of the curtain is at least about 45 weight percent. This is far higher than the solids of the curtain of Hughes.

Yokota teaches multilayer coating but at low speed (200 m/min and lower) and relatively low solids. Many problems are known in the art of coating with high solids curtains, i.e. it is not a trivial matter to modify the process of Hughes or Yokota by raising the solids. See, e.g. U.S. Patent 5,447,753. Increasing the coating speed and the solids content merely exacerbates these known problems.

Thus, neither Hughes nor Yokota support the premise that Schweizer enables the skilled artisan to practice a high speed, high solids, multilayer curtain coating process as claimed by Applicants.

Applicants maintain that Schweizer does not enable the skilled artisan to practice a high speed, high solids, multilayer curtain coating process as claimed by Applicants. The Schweizer article itself contains no examples or other teaching as to how one would practice high speed, high solids, multilayer curtain coating. While Examiner would rely on Table 1 of Schweizer, Schweizer at page 4 states: "The premetered processes like all other coating processes are subject to certain limits. An exact quantification of these limits is impossible, because it always depends on numerous relevant process parameters.

Caution should therefore be used in interpreting Table 1." (Emphasis supplied.) Not only does Schweizer not contain any examples, it warns the reader that the contents of Table 1 are speculative.

The teachings of Schweizer cover a broad range of coating conditions and applications. Some of the conditions contained in Table 1 of Schweizer relate to low solids coating. Perhaps Schweizer arguably could be seen as enabling for low solids coating at high speed, but it is clear that Schweizer does not enable the high solids coating process claimed in the present application.

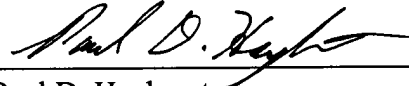
As further evidence that Schweizer does not enable the practice of high solids, high-speed, multilayer curtain coating, Examiner's attention is directed to a reference edited by Kistler, S.F. and P.M. Schweitzer, who is the same person as the author of the Schweizer reference. Schweizer at page 1 states that the fundamentals of the premetered coating process are well known, citing, e.g. "Liquid Film Coating," Kistler, S.F. and Schweizer, P.M. (editors), Chapman & Hall, London (1997) [hereinafter Kistler]. Chapter 11 of Kistler is devoted to premetered coating processes and discusses limits of operability. Chapter 15 of Kistler discusses control of the process. A copy of Chapters 11 and 15 is enclosed for Examiner's convenience. However, Kistler does not teach nor suggest a high solids, high speed curtain coating process as claimed by Applicants.

In fact, Kistler teaches that there are limits to the curtain coating process. For example, Fig. 11c.28 of Kistler shows a maximum speed of under 900 cm/s (540 m/min.) for curtain coating for bone gelatin solutions with viscosities of 63 and 220 mPas. As argued in Applicants' Response to Final Rejection, U.S. Patent 5,447,753 is one example of a reference that discusses the problems associated with raising the solids content of a coating liquid. Applicants are unaware of any teaching in Kistler that would enable the present invention. More importantly, Examiner has pointed to no evidence in the Schweizer reference to support the position that Schweizer is an enabling reference with respect to the conditions of the process of the present invention. For the foregoing reasons, reconsideration of all rejections is requested.

III. Conclusion

Reconsideration of the claims and passing of the application to allowance are solicited.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Paul D. Hayhurst", is written over a horizontal line.

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